#### MISCELLANEOUS NOTES

# 22. ON THE OCCURRENCE OF THE GOBY, *BRACHYGOBIUS NUNUS* (HAM.-BUCH.) IN ANDHRA PRADESH, WITH A NOTE ON ITS ECOLOGY

(With a text-figure)

The banded goby, Brachygobius nunus (Hamilton-Buchanan 1822) originally described as Gobius nunus from Calcutta, has a long nomenclature history. Subsequent to the original record, it was described as Gobius doriae (Gunther 1869), Gobius alcockii (Annandale 1906), Ctenogobius nunus (Hora 1934), Brachygobius xanthomelas (Herre 1937) and as B. sua (Smith 1945). Weber & de Beaufort (1953) re-examined the types of Gobius doriae in the British Museum, of Brachygobius xanthomelas in the Stanford University and of Gobius alcockii in the ZSI and synonymised them with Brachygobius nunus (Ham.-Buch.). The species was earlier recorded from Madras by Koumans (1941). The present note extends its range of distribution to Andhra Pradesh.

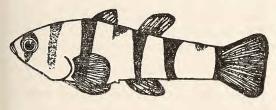


Fig. 1. Brachygobius nunus
18 mm total length, Bhimavaram.

Description: Based on 10 specimens, 15-18 mm total length (one, a female 15 mm, bearing 157 eggs in ovary). Branchiostegals 5,  $D_1$  5-6,  $D_2$  8, P 13-16, V 5-6, A 7-8, Vertebrae 10 + 14 = 24. Depth 3.5-4.6, head length 2.8-3.7, head width 2.8-3.7, all in standard length.

Body cylindrical anteriorly, compressed towards tail. Lower jaw projecting beyond upper jaw, fine teeth on margins of both jaws. Maxillary extends to below anterior margin of eye. Pectorals obtusely rounded, origin behind gill opening; ventrals form a disc at their base. Height of first dorsal less than that of second; the latter situated about ½ eye diameter behind tip of depressed first dorsal, height greater than eye diameter. Anal opening at tip of a small papilla. Anal origin below second ray of second dorsal, length equal to eye diameter. Caudal obtusely rounded or truncate. Body covered with ctenoid scales.

Colour: Two kinds of colour pattern have been observed from the same locality: 1. Dorsal side yellowish-green becoming pale towards ventral side with a series of vertical bands; first band dark, between eyes and descending to below eye on either side; second band indistinct, at level of opercules; third band dark, behind pectoral origin, ascending into first two dorsal rays; fourth band below anterior half of second dorsal; fifth band just behind second dorsal; sixth band on caudal peduncle; sometimes one or two incomplete dark bands are found between the fifth and sixth; fins hyaline. 2. The fifth complete dark band is on the caudal peduncle. Between the latter, and the fourth band below second dorsal, are two incomplete bands.

Ecology: This species is perhaps more widespread than is known at present. Because of its small size, it is not captured in the gear operated by local fishermen. It can be collected in portable plankton nets. It occurs in tanks with pH 7.9, temperature 24°C, having plants like Nymphaea nouchali, N. stellata, Ipomoea reptans, Spirogyra sp., and rich in Cladocera and Copepoda. It remains attached to the under surface of leaves of lotus when disturbed.

#### ACKNOWLEDGEMENTS

I am thankful to Prof. S. Dutt, Guntur and Dr P. K. Talwar, Zoological Survey of India, DEPARTMENT OF ZOOLOGY, D.N.R. COLLEGE, BHIMAVARAM 534 202, ANDHRA PRADESH, March 17, 1975.

for reviewing the manuscript, and to Major R. Pattabhirama Rao for identification of plants.

B. V. SESHAGIRI RAO

## REFERENCES

Annandale, N. (1906): Notes on the freshwater fauna of India. No. VII. A new goby from fresh and brackish water in lower Bengal, Calcutta. J. Asiat. Soc. Bengal 2:1-57.

HAMILTON-BUCHANAN, F. (1822): An account of the fishes of the Ganges, Edinburgh, p. 54.

HORA, S. L. (1934): The systematic position of Hamilton's species of gobioid fishes from the Ganges.

Rec. Indian Mus. 36:483-490.

KOUMANS, F. P. (1941): Gobioid fishes of India. *Mem. Indian Mus.* 36:483-490.

SMITH, H. M. (1945): The freshwater fishes of Siam or Thailand. U.S. Nat. Mus. Bull. 188:549.

WEBER, M. & DE BEAUFORT, L. F. (1953): Fishes of the Indo-Australian Archipelago, p. 194.

## 23. ADDITIONS TO THE FOOD PLANTS OF INDIAN RHOPALOCERA

Mr. Sevastopulo has done a great service to Indian entomology by collating in one comprehensive list most of the scattered references to the food plants of Indian Rhopalocera (JBNHS, 70:156-183). There must still, however, be a large number of published references and unpublished records of casual observations. If these could be sent to the Society for publication our recorded knowledge would be much more complete. As a start, here are a few observations and additions, some of which have previously been published in the Journal.

# PAPILIONIDAE

Polydorus philoxenus Gray. As far as I am aware, khasiana is the only Indian species of the genus Nepenthes. It is a rare plant, with a restricted and localised distribution, being confined to the Khasi and Jaintia and North

Cachar Hills of Assam. The widely occurring *philoxenus* must, therefore, feed on a different food plant throughout most of its range.

# PIERIDAE

Delias aglaia L. I confirm that this feeds on Loranthus sp. in Sibsagar Dt. of Upper Assam.

#### SATYRIDAE

Elymnias nesoea Wall. Larvae found on various wild canes and palms.

Elymnias vasudeva M. Q hatched 29-vii-56 from pupa found on an eaten spray of *Dendrobium? fimbriatum* (Orchidaceae). Sibsagar Dt., Upper Assam.

#### Nymphalidae

Eriboea arja Fd. Albizzia sp. in Sibsagar Dt. of Upper Assam.